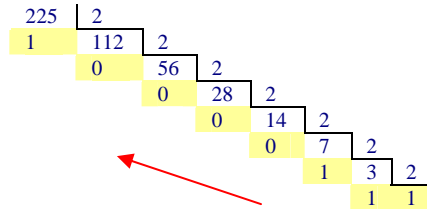


## CAMBIO DE BASE

- $225,5_{10}$

*Decimal a binario:*

Parte entera



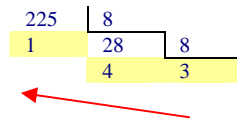
$$225,5_{10} = 11100001,1_2$$

Parte decimal

$$0,5 \times 2 = 1,0$$

*Decimal a octal:*

Parte entera



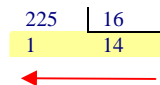
$$225,5_{10} = 341,4_8$$

Parte decimal

$$0,5 \times 8 = 4$$

*Decimal a hexadecimal:*

Parte entera



$$225,5_{10} = E1,8_{16}$$

Parte decimal

$$0,5 \times 16 = 8,0$$

- $110101,101_2$

*Binario a decimal:*

$2^5$	$2^4$	$2^3$	$2^2$	$2^1$	$2^0$	$2^{-1}$	$2^{-2}$	$2^{-3}$	Suma
x 1	x 1	x 0	x 1	x 0	x 1	x 1	x 0	x 1	
32	16	0	4	0	1	0,5	0	0,125	=53,625

$$110101,101_2 = 53,625_{10}$$

*Binario a octal:*

Octal	0	1	2	3	4	5	6	7
Binario	000	001	010	011	100	101	110	111

$$110101,101_2 = 65,5_8$$

*Binario a hexadecimal:*

Octal	0	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17
Hexadecimal	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Binario	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111

**110101,101<sub>2</sub>=35,A<sub>16</sub>**

- **6E,C<sub>16</sub>**

*Hexadecimal a decimal:*

$16^1$	$16^0$	$16^{-1}$	Suma
$\times 6$	$\times 14$	$\times 12$	
96	14	0,75	= 110,75

**6E,C<sub>16</sub>=110,75<sub>10</sub>**

*Hexadecimal a binario:*

**6E,C<sub>16</sub>=01101110,1100<sub>2</sub>**

*Hexadecimal a octal:*

**6E,C<sub>16</sub>=01101110,110<sub>2</sub>=156,6<sub>8</sub>**

- **74,1<sub>8</sub>**

*Octal a decimal:*

$8^1$	$8^0$	$8^{-1}$	Suma
$\times 7$	$\times 4$	$\times 1$	
56	4	0,125	=60,125

**74,1<sub>8</sub>=60,125<sub>10</sub>**

*Octal a binario:*

**74,1<sub>8</sub>=111100,001<sub>2</sub>**

*Octal a hexadecimal:*

Según tabla:

Octal	0	1	2	3	4	5	6	7	10	11	12	13	14	15	16	17
Hexadecimal	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
Binario	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111

**74,1<sub>8</sub>=111100,001<sub>2</sub>=3C,2<sub>16</sub>**

**OPERACIONES**

- $1101101,1101_2+1011,0011_2$

$$\begin{array}{r}
 \phantom{1} \phantom{1} \phantom{0} \phantom{1} \phantom{1} \phantom{0} \phantom{1} \phantom{,} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 1 \phantom{1} \phantom{0} \phantom{1} \phantom{1} \phantom{0} \phantom{1} \phantom{,} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 + \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{0} \phantom{1} \phantom{,} \phantom{0} \phantom{0} \phantom{0} \phantom{1_2} \\
 \hline
 1 \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{0} \phantom{1} \phantom{,} \phantom{0} \phantom{0} \phantom{0} \phantom{0_2}
 \end{array}$$

- $1101101,1101_2+1011,0011_2$

$$\begin{array}{r}
 \phantom{1} \phantom{1} \phantom{0} \phantom{1} \phantom{1} \phantom{0} \phantom{1} \phantom{,} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 1 \phantom{1} \phantom{0} \phantom{1} \phantom{1} \phantom{0} \phantom{1} \phantom{,} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 - \phantom{1} \phantom{1} \phantom{0} \phantom{0} \phantom{0} \phantom{1} \phantom{0} \phantom{,} \phantom{0} \phantom{0} \phantom{1} \phantom{1_2} \\
 \hline
 1 \phantom{1} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{1} \phantom{0} \phantom{,} \phantom{1} \phantom{0} \phantom{1} \phantom{0_2}
 \end{array}$$

- $101101_2 \times 111_2$

$$\begin{array}{r}
 \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 + 1 \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \\
 \hline
 1 \phantom{0} \phantom{0} \phantom{1} \phantom{1} \phantom{1} \phantom{0} \phantom{1} \phantom{1_2}
 \end{array}$$

- $101101_2:111_2$

$$\begin{array}{r}
 1 \phantom{0} \phantom{1} \phantom{1} \phantom{0} \phantom{1_2} \big| 1 \phantom{1} \phantom{1_2} \\
 - \phantom{1} \phantom{1} \phantom{1} \phantom{1} \phantom{0_2} \\
 \hline
 0 \phantom{1} \phantom{0} \phantom{0} \phantom{0} \\
 - \phantom{1} \phantom{1} \phantom{1} \phantom{1} \\
 \hline
 0 \phantom{0} \phantom{1} \phantom{1}
 \end{array}$$

- $AB5C_{16}-FF6_{16}$

$$\begin{array}{r}
 \phantom{A} \phantom{B} \phantom{5} \phantom{C_{16}} \\
 A \phantom{B} \phantom{5} \phantom{C_{16}} \\
 - \phantom{A} \phantom{B} \phantom{5} \phantom{C_{16}} \\
 \hline
 9 \phantom{B} \phantom{6} \phantom{6_{16}}
 \end{array}$$

- $357_8+77_8$

$$\begin{array}{r}
 \phantom{3} \phantom{5} \phantom{7_8} \\
 1 \phantom{1} \\
 3 \phantom{5} \phantom{7_8} \\
 + \phantom{3} \phantom{5} \phantom{7_8} \\
 \hline
 4 \phantom{5} \phantom{6_8}
 \end{array}$$